**Worksheet 4.2E- PIKETOLL NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

The group PIKETOLL contains lists MILE and TOLL. This is the mileage traveled by drivers on the PA turnpike and the toll that they paid (in dollars).

1. Create a scatterplot of Mile (x) versus Toll (y) below. Describe the plot.
2. Calculate the LSR line, r and r2. Add the line to the plot.
3. Do you think line does a good job of describing our data? (Use r, r2, and the original plot to answer this)
4. Create a residual plot. Sketch it below.
5. Using the residual plot, is the line the BEST model for our data? Why?
6. But (based on our original scatterplot) is our line a GOOD model for our data?